

IN THE CLAIMS

Claim 1 (original) An immunostimulating composition comprising encapsulating microspheres comprised of (a) a biodegradable-biocompatible poly (DL-lactide-co-glycolide) as the bulk matrix produced by a solvent evaporation process wherein the molecular weight of the copolymer is between 4,000 to 100,000 daltons and (b) an immunogenic substance consisting of a conformationally native subunit of chronic intracellular pathogen which, in the course of natural infection with that pathogen, is exposed to the host immune system on the surface of free pathogen and/or pathogen-infected cells.

Claim 2 (Previously presented) The immunostimulating composition described in claim 1 wherein the immunogenic substance is an antigen and the antigen is pre-encapsulated into a conformationally stabilizing hydrophobic matrix consisting of an appropriate mono, di- or tri-saccharide or other carbohydrate substance by lyophilization prior to its final encapsulation into the PLGA microsphere by a solvent extraction process employing acetonitrile as the polymer solvent, mineral oil as the emulsion's external phase, and heptane as the extractant.

Claim 3. (Previously presented) The immunostimulating compositions described in claims 1 wherein the immunogenic substance is a native (oligomeric) HIV-1 envelope antigen that is conformationally stabilized by the polymer matrix and serves to elicit in animals the production of HIV specific cytotoxic T lymphocytes and antibodies preferentially reactive against native HIV-1 envelope antigen.

Claim 4. (original) The immunostimulating compositions described in claim 3 wherein the amount of said immunogenic substance within the microcapsule comprises between 0.5% to 5.0% of the weight of the composition.

Claim 5. (previously presented) The immunostimulating compositions described in claim 4, wherein the relative ratio between the amount of the lactide:glycolide components of said matrix is within the range of 52:48 to 0:100.

Claim 6. (original) The immunostimulating compositions described in claim 5 wherein the molecular weight of said copolymer is between 4,000 to 50,000 daltons.

Claim 7 (Previously presented) A vaccine consisting of a blend of immunostimulating compositions of claim 5.

Claim 8 (previously presented) The immunostimulating composition described in claim 5, employed as a parenterally administered vaccine wherein the diameter size range of said vaccine microspheres lies between 1 nanometer and 20 microns.

Claim 9. (original) The immunostimulating compositions described in claim 5, employed as a mucosal vaccine wherein the size of more than 50% (by volume) of said vaccine microspheres is between 5 to 10 microns in diameter.

Claim 10. (original) A composition in accordance with claim 1 wherein the microspheres further contain a pharmaceutically-acceptable adjuvant.

Claim 11 (previously presented) A vaccine consisting of a blend of immunostimulating compositions of claim 6.

Claim 12. (previously presented) The immunostimulating composition described in claim 6, employed as a parenterally administered vaccine wherein the diameter size range of said vaccine microspheres lies between 1 nanometer and 20 microns.

Claim 13 (previously presented) The immunostimulating compositions described in claim 7 employed as a parenterally administered vaccine wherein the diameter size of said vaccine microspheres lies between 1 nanogram and 20 microns.

Claim 14 (previously presented) The immunostimulating compositions described in claim 6 employed as a mucosal vaccine wherein the size of more than 50% (by volume) of said vaccine microspheres is between 5 to 10 microns in diameter.

Claim 15-33 (Cancelled)